Laparoscopic-assisted transgastric endoscopic retrograde cholangiography (ERC) with papillotomy in patients with biliary complications after gastric bypass Y-Roux

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INTRODUCTION

Gastric bypass with Y-Roux (figure 1) excludes the common bile duct from conventional treatment with endoscopic retrograde cholangiography (ERC). Due to the initial rapid weight loss, patients after bariatric surgery often show an increased risk for gallstones in the gallbladder as well as in the common bile duct. Various techniques to access the common bile duct have been described. The techniques are characterized by complexity and varying results. The aim of this study was to assess both feasibility and success rate as well as complications of this laparoscopic-assisted transgastric ERC approach with papillotomy in patients after gastric bypass with Y-Roux.

METHODS

Retrospective All patients with laparoscopic-assisted transgastric ERC with papillotomy performed at a referral bariatric center between June 2013 and January 2017 were reviewed. Access to the stomach to perform ERC with papillotomy was provided through the remnant stomach (picture 1).

Picture 1 (left): laparoscopic-assisted transgastric ERC with papillotomy

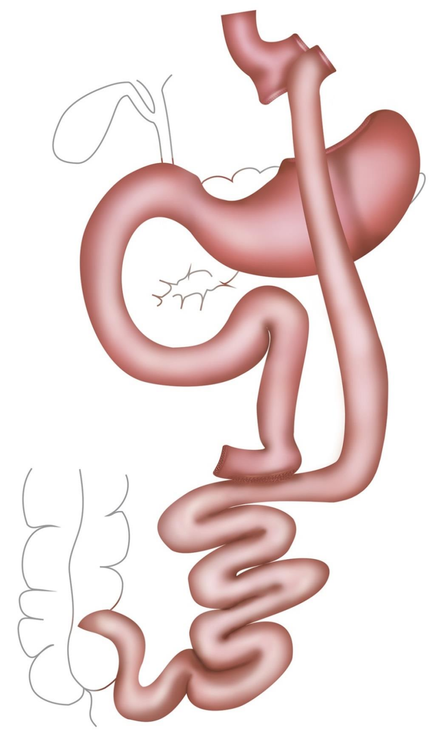

Figure 1 (right): Anatomy of a Rox-en-Y- gastric bypass.

RESULTS

Eight laparoscopic-assisted transgastric ERC with papillotomy were performed. In four patients, a concurrent cholecystectomy with intraoperative cholangiography was performed. Indication was choledocholithiasis in six and dysfunction of the sphincter Oddi in two patients. All procedures were conducted with a 100% success in cannulation of the common bile duct. Only one patient showed mild post-ERC pancreatitis in the consecutive laboratory controls. Median hospital stay was 6.3+2.6 days (range 3-10). No postoperative complications such as bleeding, hematoma or intra-abdominal abscesses were observed. None of the patients needed further interventions regarding the common bile duct.

CONCLUSIONS

Laparoscopic-assisted transgastric ERC with papillotomy through the remnant stomach is a feasible and safe technique in patients suffering from post-bariatric biliary complications after gastric bypass with Y-Roux. These patients should be referred to a specialized obesity centre to avoid percutaneous transhepatic cholangiography or open surgery interventions to access the biliary tract.